

## **Claim Amendments**

Claims 1-18 (Canceled)

19. (Currently Amended) A recombinant  $\alpha$ -N-acetylglucosaminidase or a fragment thereof having  $\alpha$ -N-acetylglucosaminidase activity wherein said  $\alpha$ -N-acetylglucosaminidase or fragment thereof hydrolyzes  $\alpha$ -N-acetylglucosamine residues from the non-reducing terminus of heparan sulphate and wherein the recombinant  $\alpha$ -N-acetylglucosaminidase comprises ~~at least one of an~~ the amino acid sequence as set forth in SEQ ID NO:2[[,]] ~~an amino acid sequence having at least 80% sequence identity to the amino acid sequence set forth in SEQ ID NO:2~~ or an amino acid sequence encoded by a polynucleotide capable of hybridizing to SEQ ID NO:1 or SEQ ID NO:3 under high stringency conditions wherein the molecular weights of the recombinant  $\alpha$ -N-acetylglucosaminidase are about 89kDA and about 79kDa as determined by SDS PAGE.

20. (Previously Presented) The recombinant  $\alpha$ -N-acetylglucosaminidase according to claim 19 in pure form relative to non  $\alpha$ -N-acetylglucosaminidase material as determined by weight, activity, amino acid homology or similarity, antibody reactivity or other convenient means.

21. (Previously Presented) The recombinant  $\alpha$ -N-acetylglucosaminidase according to claim 19 when expressed in mammalian, yeast or insect cells.

22. (Previously Presented) The recombinant  $\alpha$ -N-acetylglucosaminidase according to claim 21 when expressed in mammalian cells.

23. (Previously Presented) The recombinant  $\alpha$ -N-acetylglucosaminidase according to claim 21, wherein the cells are capable of glycosylating said recombinant  $\alpha$ -N-acetylglucosaminidase.

24. (Previously Presented) The recombinant  $\alpha$ -N-acetylglucosaminidase according to claim 22 wherein the cells are capable of N-glycosylating said recombinant  $\alpha$ -N-acetylglucosaminidase.

25. (Previously Presented) The recombinant  $\alpha$ -N-acetylglucosaminidase according to claim 24 wherein the cells are CHO cells.

26. (Previously Presented) The recombinant  $\alpha$ -N-acetylglucosaminidase according to claim 19 wherein said recombinant  $\alpha$ -N-acetylglucosaminidase is in a glycosylated form.

27. (Previously Presented) The recombinant  $\alpha$ -N-acetylglucosaminidase according to claim 26 wherein the molecular weight of the glycosylated form as determined using SDS/PAGE is at least approximately 79 kDa.

28. (Canceled)

29. (Currently Amended) The recombinant  $\alpha$ -N-acetylglucosaminidase according to claim 19 comprising ~~a sequence of amino acids corresponding to human  $\alpha$ -N-acetylglucosaminidase~~ an amino acid sequence as set forth in SEQ ID NO:2.

30. (Previously Presented) The recombinant  $\alpha$ -N-acetylglucosaminidase according to claim 19 when fused to another proteinaceous molecule.

31. (Previously Presented) The recombinant  $\alpha$ -N-acetylglucosaminidase according to claim 30 wherein the other proteinaceous molecule is an enzyme, reporter molecule, purification moiety and/or a signal sequence.

Claims 32-34 (Canceled)

35. (Currently Amended) A recombinant  $\alpha$ -N-acetylglucosaminidase or a fragment thereof having  $\alpha$ -N-acetylglucosaminidase activity produced by expression of a nucleic acid molecule which encodes or is complementary to a sequence which encodes an  $\alpha$ -N-acetylglucosaminidase or fragment thereof having  $\alpha$ -N-acetylglucosaminidase activity, wherein said recombinant  $\alpha$ -N-acetylglucosaminidase or fragment thereof hydrolyzes  $\alpha$ -N-acetylglucosamine residues from the non-reducing terminus of heparan sulphate, wherein the recombinant  $\alpha$ -N-acetylglucosaminidase comprises ~~at least one of~~ an the amino acid sequence as set forth in SEQ ID NO:2[[,]] ~~an amino acid sequence having at least 80% sequence identity to the amino acid sequence set forth in SEQ ID NO:2[[,]]~~ or an amino acid sequence encoded by a polynucleotide capable of hybridizing to SEQ ID NO:1 or SEQ ID NO:3 under high stringency conditions, ~~and~~ wherein the molecule is carried by a vector capable of replication in a eukaryotic or prokaryotic cell and wherein the molecular weights of the recombinant  $\alpha$ -N-acetylglucosaminidase are about 89kDA and about 79kDa as determined by SDS PAGE.

36. (Original) The recombinant  $\alpha$ -N-acetylglucosaminidase according to claim 35 when glycosylated.

Claims 37-59 (Canceled)

60. (Currently Amended) A pharmaceutical composition comprising a recombinant  $\alpha$ -N-acetylglucosaminidase or a fragment thereof having  $\alpha$ -N-acetylglucosaminidase activity and one or more pharmaceutically acceptable carriers and/or diluents wherein said  $\alpha$ -N-acetylglucosaminidase or fragment thereof hydrolyzes  $\alpha$ -N-acetylglucosamine residues from the non-reducing terminus of heparan sulphate, wherein the recombinant  $\alpha$ -N-acetylglucosaminidase comprises ~~at least one of~~ an the

amino acid sequence as set forth in SEQ ID NO:2 ~~[[,]] an amino acid sequence having at least 80% sequence identity to the amino acid sequence set forth in SEQ ID NO:2[[,]]~~ or an amino acid sequence encoded by a polynucleotide capable of hybridizing to SEQ ID NO:1 or SEQ ID NO:3 under high stringency conditions and wherein the molecular weights of the recombinant  $\alpha$ -N-acetylglucosaminidase are about 89kDA and about 79kDa as determined by SDS PAGE.

61. (Previously Presented) The pharmaceutical composition according to claim 60 wherein the recombinant  $\alpha$ -N-acetylglucosaminidase comprises an amino acid sequence as set forth in SEQ ID NO:2.

62. (Previously Presented) The pharmaceutical composition according to claim 60 wherein the recombinant  $\alpha$ -N-acetylglucosaminidase is produced in a mammalian cell.

63. (Previously Presented) The pharmaceutical composition according to claim 62 wherein the mammalian cell is a CHO cell line which is capable of glycosylating the recombinant  $\alpha$ -N-acetylglucosaminidase.

64. (Original) The pharmaceutical composition according to claim 60 wherein the  $\alpha$ -N-acetylglucosaminidase is glycosylated.

Claims 65-110 (Canceled)